

WHAT IS CLAIMED IS:

1. A compound 8 to 80 nucleobases in length targeted to a nucleic acid molecule encoding forkhead box O1A, wherein the compound is at least 70% complementary to a nucleic acid molecule encoding forkhead box O1A and modulates expression of forkhead
5 box O1A by at least 10%.
2. A compound of claim 1 wherein the forkhead box O1A is human forkhead box O1A.
- 10 3. A compound of claim 1 wherein the forkhead box O1A is mouse forkhead box O1A.
4. A compound of claim 1 wherein the compound is targeted to the 5' untranslated region, the start codon region, the coding region, the stop codon region, or the 3' untranslated region of the nucleic acid molecule encoding forkhead box O1A.
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5. A compound of claim 4 wherein the compound is targeted to the 5' untranslated region.
6. A compound of claim 4 wherein the compound is targeted to the start codon region.
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7. A compound of claim 4 wherein the compound is targeted to the coding region.
8. A compound of claim 4 wherein the compound is targeted to the stop codon region.
- 25 9. A compound of claim 4 wherein the compound is targeted to the 3' untranslated region.
10. A compound of claim 1 wherein the compound modulates forkhead box O1A expression by at least 70%.
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11. A compound of claim 1 wherein the compound modulates forkhead box O1A expression by at least 80%.

12. A compound of claim 1 wherein the compound modulates forkhead box O1A expression by at least 90%.

13. A compound of claim 1 wherein the compound modulates forkhead box O1A
5 expression by at least 95%.

14. A compound of claim 1 wherein the compound comprises SEQ ID NO:18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 51, 52, 54, 86, 159, 160, 161, 162, 163, 164, 165, 166, 167, or 168.

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15. A compound of claim 14 wherein the compound comprises SEQ ID NO:21, 32, 34, 40, 42, 86, 159, 160, 161, 162, 163, 164, 165, 166, 167 or 168.

16. A compound of claim 15 wherein the compound comprises SEQ ID NO:159, 160,
15 161, 162, 163, 164, 165, 166, 167 or 168.

17. A compound of claim 1 wherein the compound comprises SEQ ID NO:59, 60, 61, 62, 63, 65, 66, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 88, 89, 90, 91, 93, 94, or 96.

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18. A compound of claim 17 wherein the compound comprises SEQ ID NO:70, 66, or 81.

19. A compound of claim 1 which is an antisense oligonucleotide.

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20. A compound of claim 19 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

21. A compound of claim 20 wherein the modified internucleoside linkage is a
30 phosphorothioate linkage.

22. A compound of claim 19 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

23. A compound of claim 22 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

24. A compound of claim 19 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

25. A compound of claim 24 wherein the modified nucleobase is a 5-methylcytosine.

26. A compound of claim 19 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

27. A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

28. A composition of claim 27 further comprising a colloidal dispersion system.

29. A composition of claim 27 wherein the compound is an antisense oligonucleotide.

30. A method of decreasing the expression of forkhead box O1A in cells or tissues comprising contacting the cells or tissues with a compound of claim 1 so that expression of forkhead box O1A is decreased.

31. A method of claim 30 wherein the tissue or cells is liver or fat tissue or cells.

32. A method of treating an animal having a disease or condition associated with forkhead box O1A comprising administering to the animal a therapeutically or prophylactically effective amount of a compound of claim 1 so that expression of forkhead box O1A is decreased.

33. A method of claim 32 wherein the disease or condition is a hyperproliferative disorder.

34. A method of claim 33 wherein the hyperproliferative disorder is cancer.

35. A method of claim 34 wherein the cancer is rhabdomyosarcoma.

5 36. A method of claim 32 wherein the disease or condition is diabetes.

37. A method of claim 36 wherein the diabetes is type 2.

38. A method of screening for a modulator of forkhead box O1A, the method
10 comprising the steps of:

a) contacting a target region of a nucleic acid molecule encoding forkhead box O1A with one or more candidate modulators of forkhead box O1A expression which bind to the target region, and

b) identifying one or more modulators of forkhead box O1A expression which
15 modulate the expression of forkhead box O1A.

39. A method of decreasing blood or plasma glucose in an animal comprising administering to the animal a therapeutically or prophylactically effective amount of a compound of claim 1 so that expression of forkhead box O1A is decreased.

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40. A method of improving glucose tolerance in an animal comprising administering to the animal a therapeutically or prophylactically effective amount of a compound of claim 1 so that expression of forkhead box O1A is decreased.

25 41. A method of normalizing insulin levels in an animal comprising administering to the animal a therapeutically or prophylactically effective amount of a compound of claim 1 so that expression of forkhead box O1A is decreased.